

SWBAT

use the idea of Net Force

Sep 4-7:31 AM

Welcome!!!

SECA CP Physics
Wednesday 10 February 2016



PEDs with Passing

H. Leslie Grebe
Room C-244

Centering
(animals)

- Show me SchoolView if you want phone in class...
- PhET Forces in 1d

Opening Activity:

If you want to time a moving object, what is likely to cause errors? What can we do to minimize those errors?

- NOT STOPPING / STARTING EXACTLY RIGHT
 - GOES FAST! HUMAN ERROR
- SLO PRO: TIMER IN VIEW

Tabata check-in

The will to succeed is important, but what's more important is the will to prepare.
Bobby Knight

Sep 7-7:04 AM

What we should have solid:

Memorize our ~~5~~⁸ vocab cards, units, vector or not, definition, formula

Be able to answer distance vs displacement questions

Be able to make measurements of real-life motion. Know what is likely to make timing things difficult and how to get more reliable timing results

Be able to convert between miles and meters, between hours, minutes, and seconds

Be able to calculate speed = dist/time and velocity = disp/time

Know what all of the symbols in the UAM equations stand for and mean

Be able to turn a UAM word problem into a list of knowns and unknowns

Be able to pick the equation with those 4 things in it

Be able to put the knowns into that equation

(Be able to solve for the unknown)

→ PROJECTILES: V_x IS CONSTANT; V_y CHANGES; $a_y = -9.8 \text{ m/s}^2$ PG 42
 PG 43 TIME, Δt , CONNECTS x & y
 PG 49 VECTORS INTO x & y , ADD VECTORS
 SOH - CAH - TOA
 PG 59 DIFFERENCE BETWEEN MASS & WEIGHT
 PG 61 NET FORCE

QW every day to review - gather responses to front board.

Dec 4-9:15 AM

Unit	Chapters	Date
Left-Side Items	Page	Right-Side Items
REFLECTION ON NOTES	2	Ed Ed Adam Savage
How FAR FROM BRIDGE	4	"FORT STUEBEN"
REFLECTION ON NOTES	6	HWK: BASE UNITS
PR: DISTANCE & DISPLACEMENT	8	HWK: FP DISPLACEMENT
DIAGRAM & STEPS	10	TIMING & ERROR
SUMMARY OF TIMING	12	How to BUILD a TABLE
PR: CONVERTING SOLMS	14	HWK: FP CONVERSIONS
PR: VELOCITY & SPEED	16	HWK: FP SPEED & VELOCITY
SPEED WORD PROBLEMS	18	ALGEBRA FOR PHYSICS
LAB JOURNAL 10/7	20	LAB JOURNAL 10/8
LAB JOURNAL 10/12	24	HWK: FP GRAPH POSITION
26 USE FOR PROJECT	27	EXPERIMENT RUBRIC
OBSERVATIONS OF CORF	28	FP: INTRO TO ACC.
REVIEW FOR TEST	30	BALL ON RAMP
VECTORS, DIRECTION	32	FP: BASIC ACC EXAMPLE
PRACTICE UAM	34	FP: INTRO TO UAM
FALLING OBJECTS PACKET	36	FP: INTRO TO FREEFALL
MY FREE FALL WORD PROBLEM	38	3-ACT FALLING GLOWSTICK
Toy popper experiment	40	Free fall class solutions
Launched vs. Dropped	42	FP: INTRO TO PROJECTILE MOTION
PROJECTILE SIMULATOR	44	FP: PROJ. MOTION PROBLEM
PROJ'L PRACTICE PROBS.	46	PROJECTILES PRACTICE
OUR VECTOR PRACTICE	48	FP - VECTOR COMPONENTS
VECTOR PACKET	50	NOTES ON ADDING VECTORS
MEASURE LAUNCHER	52	NOTES ON FINDING v_f & θ
OBSERVATIONS OF OBJECTS	54	RULES OF PHYSICS NOTES
NEWTON'S 1 ST LAW	58	CONFUSING QUANTITIES
WKSHT: 2-1	60	NET FORCE
		FREE-BODY DIAGRAMS

Sep 5-9:09 AM

Everyone get a stopwatch

- all to 0:00 00
- make it say a time, stop, reset
- 3,2,1,start.... 3,2,1,stop
- fastest you can start and stop?
- 3,2,1,drop ... stop when it hits the floor

Feb 10-12:05 PM

PG 11 TIMING & ERROR.

HOW TO REDUCE ERROR

- BIGGER / LONGER \Rightarrow EASIER
- SAME PERSON "RELEASE" ALSO STARTS TIMER
- REPEAT / TIME IT MANY TIMES & TAKE AVERAGE
- VIDEO RECORD OBJECT & TIMER

Feb 10-10:00 AM

Homework due Thursday!!!

Pg 63 - Notes on (google) "Wisc-online free body diagrams" **[don't use CHROME]**

or... "Physics Classroom Free Body Diagrams"

+ PACKET on FBD!

Feb 9-8:35 AM

Feb 9-8:40 AM